

REMARKS**Status of the Claims**

Claims 1-68 are pending in the present application. Claims 1, 16, 23, 26-32, 36-40, 43-49, 54-59, 62, 63 and 66 are currently amended. In light of these amendments, and the remarks herein, reconsideration of claims 1-35 and 37-68 is respectfully requested.

Allowable Subject Matter

Applicants note with appreciation the Examiner's indication that claims 36-38 present allowable subject matter if rewritten in independent form including all of the limitations of the base claims and any intervening claims.

Amendments to the Claims

In light of the allowable subject matter, and to expedite prosecution of this application, Applicants present the following amendments without prejudice. Such amendments, however, provide no evidence regarding the propriety of any rejections regarding the filed claims in light of the cited art. Applicants maintain the right to pursue any of the filed claims in one or more continuing applications.

Independent claim 1 is amended to include recitations of allowable claim 36. In particular, claim 1 now recites the step of "controlling a temperature of said irradiated target region . . . wherein controlling the temperature comprises *heating a first selected portion* of the target region and *cooling a second selected portion* of the target region." Additionally, Applicants have amended the phrase "with a source" from the previous claim 1 to recite "with a set of one or more sources" to clarify that heating and cooling may, but are not required to be, accomplished by the same source. Claims 16, 23 and 26-31 are amended to include language consistent with amended claim 1, from which each depends. Claim 32 is amended to clarify that "thermal contact" is not intended to require direct contact with the tissue. Claim 36 is amended to clarify that the boundaries of the heated and cooled portions may overlap, and to include the allowable subject matter of former Claim 36 in currently amended Claim 1. Claims 37 and 38 are amended to depend from amended claim 1 instead of former claim 36.

Independent claim 39 is amended to also include similar recitations as were added to claim 1, i.e., controlling the temperature comprises *heating a first portion* and *cooling a second portion*, and to eliminate certain other limitations. Correspondingly, claims 40, 43-47 are amended to provide language consistent with amended claim 39, from which each depends.

Independent claim 48 is amended to include the recitation of a “second source *configured be in thermal communication with*” and “*to heat a first selected portion* of the target region” and to eliminate certain other limitations. The claim is further amended to include the element of “a cooler *configured to cool a second selected portion* of the target region.” Support for the amendments is found in the recitations of allowable claim 36 and in the bridging paragraph between pages 24 and 25 of the filed application. Claim 49 is amended to clarify that the first and second portions of Claim 48 may or may not overlap. Claims 54-57 are amended to include the recitation of “a radiation guidance device” from former claim 48 and to correct an error in the claimed dependency. Claims 58 and 59 are amended to include limitations from prior Claim 48 as dependent claims.

Independent claim 62 is amended to include the recitation that “actively controlling the temperature comprises *heating a first portion* of the target region and *cooling a second portion* of the target region,” consistent with similar recitations found in allowable claim 36, and to eliminate certain other limitations. Claim 63 is amended to conform with the amendments to claim 62.

Independent claim 66 is also amended to include similar recitations to those added to Claim 1 and other independent claims, i.e., the step of controlling temperature “comprises *heating a first portion* of the target region and *cooling a second portion* of the target region.”

Since all the amendments are supported within the filed application, no new matter is introduced.

Definiteness

Claims 41-43 stand rejected under 35 U.S.C. §112, second paragraph as being indefinite for insufficient antecedent basis. In light of the amendments presented to claim 39, from which

claims 41-43 depend, the claims have sufficient antecedent basis. Accordingly, the pending claims are all consistent with the requirements of 35 U.S.C. §112, second paragraph.

Novelty and Nonobviousness

Claims 1-5, 7-17, 20-27, 29-31, 35, 48-57, and 62-65 currently stand rejected under 35 U.S.C. §102 as being anticipated by at least one of U.S. Patent Application Publication U.S. 2001/0023363 to Harth et al. (herein “Harth”), U.S. Patent No. 5,707,401 to Talmore (herein “Talmore”), U.S. Patent No. 6,099,521 to Shadduck, and U.S. Patent No. 6,267,779 to Gerdes (herein “Gerdes”). Furthermore, claims 1, 6, 18, 19, 28, 32-34, 39-47, 58-61, and 66-68 stand rejected under 35 U.S.C. §103 as being obvious in light of some combination of Harth, U.S. Patent No. 6,387,089 to Kreindel et al., Talmore, Gerdes, and U.S. Patent No. 6,605,083 to Clement. In light of the amendments presented herewith, these grounds for rejection are now moot. Each of the independent claims has been amended to include some version of the recitation of former Claim 36, which the Examiner has found to be allowable. None of the cited references discloses these limitations – namely, heating a first portion of the target region and cooling a second portion of the target region. Thus, by including the limitations of former Claim 36 or similar limitations in each of the independent claims, Claims 1-68 are all patentable.

As discussed above, Claim 1 is amended to include the recitations of allowable claim 36. Applicant has further amended the phrase “with a source” from Claim 1 to recite “with a set of one or more sources.” However, that additional amendment is consistent with the Examiner’s finding that claim 36 includes allowable subject matter. As such, amended claim 1 presents allowable subject matter. Claims 2-38 all depend ultimately from amended claim 1. As such, the claims are patentable for at least the same reasons that amended claim 1 is patentable.

Independent Claims 39, 62, and 66 are also each amended to include steps of *heating a first portion* and *cooling a second portion*, with reference to a step involving controlling temperature in each independent claim. Applicants have also eliminated certain limitations from these claims, but these amendments do not affect the allowability of the claims given the finding that the subject matter of former Claim 36 is allowable. As such, each of the claims is patentable for at least the same reason that amended Claim 1 is patentable. Claims 40-47, 63-65, and 67-

68, dependent ultimately from claims 39, 62, and 66, respectively, are accordingly patentable for at least the same reasons that amended Claims 39, 62, and 66 are patentable.

Independent Claim 48 is drawn to a biostimulating device that includes a source configured to *heat a first portion* of the target region, and a cooler configured to *cool a second portion* of the target region. As such, the device is capable of carrying out steps of heating and cooling. Accordingly, amended claim 48 is allowable for at least the same reason that amended claim 1 is patentable, with dependent claims 49-61 therefrom being patentable for at least the same reasons that claim 48 is patentable.

Because each of the independent claims incorporates limitations similar to those of now-cancelled claim 36, which the Examiner found to be allowable, each independent claim now overcomes the previously cited rejections presented in the Office Action with regard to the previously presented claims.

CONCLUSION

In view of the amendments and remarks above, Applicants submit that claims 1-35 and 37-68 are in condition for allowance, and allowance thereof is respectfully requested. Applicants encourage the Examiner to telephone the undersigned in the event that such communication might expedite prosecution of this matter.

Dated: May 25, 2006

Respectfully submitted,

By: 

Reza Mollaaghababa
Registration No. 43,810
NUTTER MCCLENNEN & FISH LLP
World Trade Center West
155 Seaport Boulevard
Boston, Massachusetts 02210-2604
(617) 439-2000
(617) 310-9000 (Fax)
Attorney for Applicant